Application of Flipped Classroom in Grammar Teaching

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Abstract: Grammar teaching is an important part of English language teaching. In the influence of the curriculum reform environment, English teaching has been more emphasized on the usage of grammar skills. However, the present English grammar teaching model is still rather traditional. Therefore, the flipped classroom teaching model brings a new horizon to the field of the grammar teaching, this paper study in order to promote the application of "Flipped classroom" in grammar teaching. The research mainly includes three aspects: the development and characteristic of flipped classroom; the implementation of flipped classroom in grammar teaching and to exploring flipped classroom in grammar English teaching. Through the tracking of the investigation and data analysis, it indicates that flipped classroom in grammar teaching is beneficial for students to master and apply grammar effectively.

Introduction
Grammar, as the framework of language, holds an important level in the linguistic systems. Wilkins points out: “Without grammar, very little can be conveyed; without vocabulary, nothing can be conveyed”[1]. Grammar learning is vital to foreign language acquisition. In the process of traditional teaching, teachers have been through teaching grammar and repeated training to enhance the effectiveness of teaching. Obviously, students may feel bored of the traditional teaching model. So, the effectiveness of grammar teaching has long since been far from satisfying. According to the research, the flipped classroom mode is more effective than the traditional mode in Grammar teaching.

Flipped classroom is originated in the United States and becoming more and more popular since 1990s. The prominent features of the flipped classroom is that it changes the teaching process and uses PPT, teaching videos, teaching system and other forms of teaching material to teach the elementary knowledge before classroom instruction instead of merely in the class. The theoretical strength of this new pedagogy seems to be the combination of constructivist and behaviourist learning theories working in tandem [2]. It provide the students with all kinds of activities to master the knowledge in class, which may help arouse students’ learning interests, and at the same time, achieve learning outcomes. The quality of English teaching will directly affect the overall development of the whole elementary and secondary education, and will also affect the development of Talent. We shall strive to form the flipped classroom with Chinese English teaching features gradually in combination with the actual teaching condition in China’s English teaching[3]. This paper will introduce the concept and characteristic of “flipped classroom”, explore the current application situation of flipped classroom in grammar, and then give suggests on flipped classroom. Flip into English grammar classroom teaching reform, provides a new train of thought and view.

The Development and Characteristic of Flipped Classroom
The Development of Flipped Classroom
Flipped classroom is emphasized that students could equip the ability of "self- regulated learning". Self- regulated learning theory takes students as the main body of learning, students themselves, not
controlled by the others, undisturbed. Learning independence, self-behavior and self-discipline are
the three basic characteristics of autonomous learning. Meanwhile, the independence is the basis of
self-regulated learning, self-behavior is the essence of self-access learning, and self-discipline is
the guarantee of self-regulated learning. This shows the one thought: study subject is the master of
his own learning; learning is ultimately dominated by learning subject yourself. The famous
American education psychologist Barry J. Zimmerman's self-regulated learning model is shown in
Fig. 1. [4]

![Self-regulated Learning Modal of Barry J. Zimmerman](image)

**Figure 1. Self-regulated Learning modal of Barry J. Zimmerman**

It was in the early 19th century that the Flipped Classroom thought appeared. The flipped model
is an interactive teaching method with a student-centered approach that “flips” the traditional
classroom by moving information transfer out and moving information assimilation into the
classroom [5]. In 2004, Salam Khan made videos about learning materials and uploaded them to
website, which was popular among students. Later, he founded Khan Research Institution and
stimulated rapid development of the Flipped Classroom. In 2007, Jon Bergmann and Aaron Sams,
two chemistry teachers at America high school, uploaded PowerPoint they had made to website and
required students to learn after class and finish homework in classroom. And they gained an
unexpected teaching effect. From then on, the Flipped Classroom mode has been popularized at all
published articles about Flipped Classroom and called it a great reform of classroom teaching
models in the world. Although shortcomings still exist in this new teaching model, it will be
improved in the development in the future [6].

Nowadays, our domestic research and application about the flipped classroom is still in the
beginning stage. Recently, there are more related researches about the flipped classroom teaching
model was proposed of domestic, especially in English teaching. The rapid development of our
domestic information technology and application of the network technology and the effective
implementation of the planning of the Ministry of Education provides wide platforms and good
opportunities for the application of the flipped classroom in English grammar teaching.

**Comparative Analysis on Traditional Classroom and Flipped Classroom**

The biggest difference between flipped classroom and traditional classroom teaching mode is
that teaching and learning are separated, and the order of teaching and learning is exchanged. Traditional
teaching is teachers’ one-way knowledge, which lead to students' learning autonomy has not been
displayed. It is composed of teaching, learning new knowledge, review learnt knowledge, homework
and so on several sections. Due to the lack of good environment, lack of initiative of students
outside the classroom, on the "absorption internalization" this link in the process of learning, the
student to the migration of knowledge and understanding is not enough in-depth . In flipped
classroom, students use video to learning knowledge before the class. Mason found that students in flipped classrooms like the use of video and feel the inversion is a better use of class time [7]. Through the network or video, it has many important functions: playback, pause and repetition. So, active learning is a key aspect of the flipped classroom. When students back to the classroom, teachers and students can face to face to communicating and discussing the difficult points. According to the interactive discussion between teacher and students, “assimilating and internalization” is completed in the classroom. It realizes the complete reversing of the study process from the time and space, which is the new teaching mode of “teaching after learning”. This is a new teaching form and it gets more and more attention in education.

Table1. Comparative analysis on traditional classroom and flipped classroom

<table>
<thead>
<tr>
<th>No.</th>
<th>Comparative analysis</th>
<th>Traditional classroom</th>
<th>Flipped classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher</td>
<td>Knowledge imparter and classroom master</td>
<td>Student learning guide and facilitator</td>
</tr>
<tr>
<td>2</td>
<td>Students</td>
<td>The passive recipients of knowledge</td>
<td>Active learning and researchers</td>
</tr>
<tr>
<td>3</td>
<td>Students' literacy</td>
<td>High self-learning ability</td>
<td>Low self-learning ability</td>
</tr>
<tr>
<td>4</td>
<td>Time allocation</td>
<td>Teachers explain most of the time</td>
<td>Discuss in learning most of the time</td>
</tr>
<tr>
<td>5</td>
<td>Teaching equipment</td>
<td>Chalk, blackboard, recorder and PPT</td>
<td>Micro-video and teaching plan</td>
</tr>
<tr>
<td>6</td>
<td>Teaching form</td>
<td>Class explanation +class homework</td>
<td>Learning before class and inquiry in class</td>
</tr>
<tr>
<td>7</td>
<td>Teaching content</td>
<td>Knowledge explanation and instruction</td>
<td>Problem inquiry learning</td>
</tr>
<tr>
<td>8</td>
<td>Teaching methods</td>
<td>Present new knowledge</td>
<td>Autonomy, cooperation and explore learning</td>
</tr>
<tr>
<td>9</td>
<td>Teaching evaluation</td>
<td>Paper test</td>
<td>Multi-angle and multi-mode evaluation</td>
</tr>
</tbody>
</table>

**The Implementation of Flipped Classroom in Grammar Teaching**

**Establish a Strong Belief in Flipped Classroom**

Ideas decide behavior. As is the education concept, so is the education behavior. The implementation of the flipped classroom is bound to breaking the balance between teacher and educational environment. The school should provide technical support for making grammar class efficiency. In addition, teachers should spend much time and energy developing the revolution of flipped classroom.

**Students are the Center of Teaching**

As the emerging teaching mode, students convert to the “main part” of teaching. Obviously, the transformation mainly requires students to further improve students' autonomous learning ability. There are three links to achieve the material transformation, namely, “pre-class, in-class and after-class”. In pre-class, students become the clues and collectors of information, which requires students to collect the relevant information according to the learning tasks required by this class. Students can watch teaching video for mastering knowledge. In the classroom participation, students become the main participants of teaching contents to interact with teachers and classmates effectively. Instead of being passive knowledge receivers, students become the center of class and are entitled to decide learning time, place and contents. They can share the information and views which they have collected before the class. According to the class, they have a deep understanding.
of the contents need to be mastered in the process of discussion. Students shall make feedback of the grammar learning in after-class, find out problems, and take initiative to improve them. The joint propulsion of the three links can not only help students to develop the ability of autonomous learning effectively, but also can cultivate the tacit understanding between students and teachers, to enhance the efficiency of teaching. Developments in active learning approaches combined with innovations in instructional technology have led to increased use of the flipped classroom model [8].

![Flipped Classroom Process](image)

**Figure 2. Flipped Classroom Process**

**Provide a Technique Platform**

In contemporary times, with the development of the Internet, technology has provided excellent technical platform for the innovation and development of education. “Highly shared” is the major characteristic of the realization of “flipped classroom”, so the teachers and students can use the education resources anywhere and anytime. The “pause” and “back” functions of online video lectures make learning more flexible, and especially aid students who find it hard to catch up with teachers in traditional class. However, flipped classroom cannot advance itself without the development of information technology. Popularity of intellectualized phones, pads and computers renders technical support to flipped classroom and makes teaching and learning a great change.

Therefore, teachers and students are required to improve their Internet application ability with emphasis, and skillfully use all kinds of multimedia teaching, to learn the course content. Teachers and students should have the awareness to improve their related skills, to lay a solid foundation for effective development of flipped classroom. Thus, education application technology should become a booster of the teaching in flipped classroom.

**The Exploration of “Flipped Classroom” in Grammar English Teaching**

After the joint efforts of several generations of education scholars and students, the flipped classroom has achieved good stage progress in English teaching classroom. The study used Middle School A as a case, to explore the effect of flipped classroom in grammar English teaching. Take students of Class Three, Grade Eight for experimental class, and Class Two for comparative class. For example, we explore the usage of “Attributive Clauses” in chapter five. Based on the task-based teaching method, the teacher put forward a question like that: How to use the relative words? Based on the question, students need to find answers before class.

**Pre-Class Learning**

The teaching video for students is about 5 to10 minutes. Teachers are required to make sufficient preparation and collect relevant background knowledge before class. It including: music, story and picture. For example, the lesson is about attributive clauses. Teacher can cite a music which lyric is
used the attributive clauses. After students watching the teaching video, students should complete the assigned homework. It is helpful for students to find difficult points. And this difficult point is the most important knowledge which should be solved in the class.

E.g. Exercises:
1. Sorry, we don’t have the coat ____ you need.
2. Do you know the man ____ is sitting behind Nancy?
3. This is the only thing ___ I bought from the supermarket.

While-Class Discussion

One of the characteristics of the flipped classroom is that assimilation is accomplished through classroom interaction. Teacher as the guide should find out where the important point timely before the class. Study found that the interaction between students is more conducive to the absorption and internalization of knowledge. Therefore, students play main parts in the classroom and achieve the maximization of knowledge. Students try to find the answer with discussion and teacher’s help.

For example: No.2, the answer is “who”. In this sentence, the antecedent restricts the usage of the relative word. According to the discussion, teacher and students would come to the conclusion that: when the antecedent represents person, we use “who/whom”; when the antecedent represents things, we use “which/that”. Only in this way can make students master the grammar well.

After-Class Feedback

In the actual teaching process, this procedure will be ignored by many teachers in flipped classroom. Actually after class feedback is conductive to help students learn about the problems exist in flipped classroom teaching in a timely manner, and accurately grasp the students’ problems in the process of participating. This part seems to be redundant, but it plays a decisive role in the practical teaching process. Therefore, teachers are required to communicate with students after class to understand the teaching trend in a time.

Comparative Analysis on Testing Results

The study chose two classes (Class Three, Grade Eight for experimental class, and Class Two for comparative class) as study object in Middle School A. Two classes are parallel classes and the average score is largely the same. The class Three (42 people) was selected as the experimental group, and Class Two (45 people) was taken as the comparative group.

The test was carried out in the experimental class and the comparative class separately, which was divided into two parts, including grammar exam and final exam. Grammar exam is divided into 3 times and grammar points as the test content which they have learned recently. The final exam content covered all of the grammar this term. The maximum score in grammar exam is 100 and in final exam is 150.

After one-semester experiment, three grammar exams and final exam were carried out. According to SPSS19.0 as tool, adding students’ scores input the systems which used scores as independent samples T test and descriptive statistics. The result is shown in table 3. (Take students of Class Three, Grade Eight for experimental class, and Class Two for comparative class.)

Table 2. Comparative scores analysis on experimental class and comparative class

<table>
<thead>
<tr>
<th>Class</th>
<th>Average</th>
<th>Standard deviation</th>
<th>Average</th>
<th>Standard deviation</th>
<th>Average</th>
<th>Standard deviation</th>
<th>Average</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental class</td>
<td>83.2</td>
<td>7</td>
<td>86.5</td>
<td>6</td>
<td>88.9</td>
<td>6</td>
<td>135.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Comparative class</td>
<td>85.1</td>
<td>6</td>
<td>85.0</td>
<td>5</td>
<td>83.3</td>
<td>6</td>
<td>130.8</td>
<td>9.8</td>
</tr>
<tr>
<td>Compare</td>
<td>T=1</td>
<td>P=0.19</td>
<td>T=1.3</td>
<td>P=0.19</td>
<td>T=4.5</td>
<td>P=0.00</td>
<td>T=2.565</td>
<td>P=0.00</td>
</tr>
</tbody>
</table>
From table 2, overall the results of the experimental class gradually show its advantage. In the second test, students and teachers gradually adapt to this teaching mode, the average test scores of the experimental class is slightly higher than the comparative class, but independent sample test the value of P above 0.05, the average score of two classes were narrow.

In the third test, the average score of experimental class grammar testing is higher than the comparative class evidently. After one term flipped classroom experiment, experimental class is higher than that of comparative class by 4.3 points, and the P value is less than 0.05. Thus it can be seen that there exist obvious differences in average scores between two classes. The results show clearly that flipped classroom in grammar teaching is beneficial for students to master and apply grammar effectively.

Conclusion

In this paper, the researcher made a research of grammar teaching. Through the research, the writer found some good effects of grammar teaching in flipped classroom. Flipped classroom changed the traditional teaching method. More importantly, it improved classroom efficiency. In addition, the flipped classroom model can increase the students’ interest in grammar learning. It takes full use of classroom time and resources as well as improves the classroom teaching efficiency. Flipped classroom enriches the content and method of grammar learning, improving students’ learning interest. The traditional teaching method is single and boring, and the interaction between teachers and students is little, which cannot arouse the interest of students in English learning. Through flipped classroom, teachers can use Internet, educational technology and the mobile equipment to carefully prepare rich online materials to broaden grammar learning methods and channels. Therefore, the student can adjust their learning pattern and allocate their time for studying grammar in line with their realities of the situation.

As the innovative teaching practice mode under Chinese education reform, “flipped classroom” has made outstanding contribution to China’s education and got rid of the traditional classroom teaching mode. Students can improve their learning interests and their autonomous learning abilities. The positive role of “flipped classroom” in English grammar teaching should not be ignored, which has injected new vitality for the current higher education reform in China.

In short, flipped classroom is a kind of teaching model that takes students as the center, which emphasizes students’ personal autonomous study. However, in order to maximize its advantages in teaching, we still need to have further exploration of flipped classroom in other areas.

References
